



UNITED STATES PATENT AND TRADEMARK OFFICE

cev

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/661,313	09/12/2003	Kevin Jackman	7429 US	7818

30078 7590 11/29/2006
MATTHEW D. RABDAU
TEKTRONIX, INC.
14150 S.W. KARL BRAUN DRIVE
P.O. BOX 500 (50-LAW)
BEAVERTON, OR 97077-0001

EXAMINER

SINARS, JAMES R

ART UNIT	PAPER NUMBER
2635	

DATE MAILED: 11/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/661,313

Applicant(s)

JACKMAN, KEVIN

Examiner

JAMES R. SINARS

Art Unit

2635

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 - 12 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>10-6-03</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art (figs. 1-2, hereinafter referred to as "prior art") in view of Plourde, JR. et al, U.S. Patent Application 20030110513.

The prior art (figs. 1-2, and corresponding disclosure) describes a system for monitoring the cold boot time required to download an application. Plourde, JR. et al describe a system that manages the allocation and storage of media files on a client device in a subscriber television environment. Ohkura et al describe a time display bar for indicating elapsed broadcast time of a Pay Per View (PPV) program. Sie et al describe a method for generating a video program menu for a video content delivery system.

Re: Claim 1, elements a,b, and f are addressed by the admitted prior art in the current application (para 0020-0023; Figs. 1 and 2).

The prior art fails to teach the following steps:

c) receiving a next occurrence after the service in the transport stream of the associated AIT section for the application;

(It is understood that these AIT elements are used to identify applications and their related software modules for downloading. Hence, Plourde, JR. et al teach that data required as input by an application may be “anticipated” [sic] by the application and thus created with the application at the time it was generated as a software application. Para 0077)

d) analyzing the associated AIT section to determine a root asset and remaining assets required by the application;

(Plourde, JR. et al teach that the identification of a service includes the identification of an executable application that provides the service along with a set of application-dependent parameters. Para 0081).

e) receiving after the associated AIT section in the transport stream a next occurrence of a module containing the root asset and subsequent occurrences of modules containing the remaining assets,

(In the admitted prior art, once the program assets are identified and analyzed, they are downloaded sequentially from the transport stream. Plourde, JR. et al teach that the downloaded modules and associated data, i.e., AIT information, would be stored in system memory. Plourde, JR. et al, para 0076, Fig. 3A/349)

recording a time of receipt of the last such module as a finish time.

(Admitted prior art)

Therefore, the combined teachings of the admitted prior art and Plourde, JR. et al, as a whole, would have rendered it obvious to merge both the AIT download and the

Art Unit: 2621

storage capabilities in order to reduce overall data access latency (Plourde, JR. et al, para 0048). This benefit is derived from the fact that the system could then predetermine the required software assets for the application and expedite their retrieval from the transport stream by downloading each element on a pre-fetch basis.

Claim 8 is an implementation of the method described in Claim 1 which has been analyzed and rejected.

3. Claims 2-4 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art (figs. 1-2, hereinafter referred to as "prior art") in view of Plourde, JR. et al, U.S. Patent Application 20030110513, as applied to claims 1 and 8 above respectively, and further in view of Ohkura et al, U.S. Patent 6347400.

Re: Claim 2, the combination of the prior art and Plourde, et al fails to teach "wherein the determining step comprises the step of outputting a signal representative of the nominal cold boot time to a user interface".

Ohkura et al teach (Background para 12) the delay in program start time associated with Near Video On Demand (NVOD) is due to the delay in the downloading, or boot time, of the program received from among several channels on the transport stream. Ohkura et al further teach that the expected delay time, until the start time of the next available program, is outputted to a user interface (Ohkura et al, para. 118; Fig. 8/NVOD REGION).

Therefore, the combined teaching of admitted prior art, Plourde Jr, and Ohkura, as a whole, would have rendered obvious the step of outputting a signal representative of the nominal cold boot time to a user interface as claimed in order to indicate a specific delay time.

Re: Claim 3, the method as recited in claim 2 further comprising the steps of: recording a new start time in the transport stream for a new selected start position; and repeating steps b) to f) for the new start position to determine a succeeding nominal cold boot time.

(See discussion w/r to Claim 1. This will apply when the user attempts to retrieve additional programs)

Re: Claim 4, the method as recited in claim 3 wherein the outputting step comprises the step of graphically displaying the nominal cold boot times.

(Refer to admitted prior art in the current application, para 0020-0023; Figs. 2. See also the discussion w/r to Claim 2)

Claim 9 is an implementation of the method described in Claim 2 which has been analyzed and rejected.

Claim 10, see claim 4.

4. Claims 5-7, 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art (figs. 1-2, hereinafter referred to as "prior art") in view of Plourde, JR. et al, U.S. Patent Application 20030110513 and Ohkura et al, U.S.

Patent 6347400 as applied to claims 2 and 9 above respectively, and further in view of Sie et al, U.S. Patent Application 20040030599.

Re: Claim 5, the combination of admitted prior art, Plourde Jr, and Ohkura et al fails to teach the method as recited in claim 1 wherein the analyzing step comprises the steps of: detecting incorrect or insufficient AIT information in the AIT section to properly download the application;

(Official Notice is taken to note that one skilled in the art would have found it well known and obvious to have a data communications system monitor and analyze received data, for example, for lost packets)

and outputting a warning signal.

(Official Notice is taken to note that it is commonly known to one skilled in the art that upon determining that data packets were lost and that retransmission is required, the receiving end would notify the transmitting end with a negative acknowledgment (NACK)).

Furthermore, Sie et al teach the display of an error message and the sounding of an error tone (Sie et al, para 0142) when a user has inappropriately fast-forwarded through a commercial segment.

Taking the combined teaching of admitted prior art, Plourde Jr, Ohkura et al and Sie et al, as a whole, it would have been obvious to one skilled in the art to employ an error message and/or audible tone as a warning in the current invention to indicate to the user that the download of the AIT has failed.

Re: Claim 6, the method as recited in claim 5 wherein the detecting step comprises the step of detecting an inability to boot the application because of the incorrect or insufficient AIT information.

(In conjunction with the discussion w/r to Claim 5, once the system has determined that AIT information is incorrect or insufficient, resulting from lost packets, it would be obvious and implied for the system to recognize the fact that the associated application would be unable to boot properly)

Re: Claim 7, the method as recited in claim 1 further comprising the step of modifying the transport stream by varying an AIT repetition rate in the transport stream to vary the nominal cold boot time.

(It would be obvious that varying the repetition rate of the AIT in the transport stream is initially a function of the transmission system, and is therefore beyond the scope of the invention. Increasing system bandwidth, which would enable an increased repetition rate of the AIT, or increasing AIT occurrences by sending it over multiple channels would improve download speed. With these system parameters in place first, the set top box (STB) would then be required to have matching capabilities. See Sie et al, para 0062)

Claim 11 is an implementation of the method described in Claim 5 which has been analyzed and rejected.

Claim 12, see claim 6.

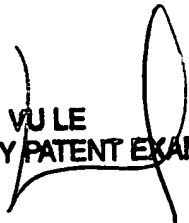
Contact

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES R. SINARS whose telephone number is 571-270-1191. The examiner can normally be reached on M-F (ALT FRI OFF) 7:30-5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, VU LE can be reached on 571-272-7332. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/James R. Sinars/


VU LE
SUPERVISORY PATENT EXAMINER